

Horticultural Auctions in the Netherlands: A Transition from "Price Discovery" Institution to "Marketing" Institution

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ABSTRACT. This paper depicts the evolution of Dutch auctions during the past hundred years from a "price discovery" institution to a "marketing" institution, focusing on price discovery. A conceptual framework is proposed to assess the suitability of marketing management by agricultural marketing institutions. The history of Dutch horticultural auctions is briefly reviewed. The conceptual framework proposed is applied to the evolution of Dutch horticultural auctions.

INTRODUCTION

Dutch horticultural auctions celebrated their centenary in 1987, and during the past hundred years have become the central marketing institution for horticultural products in the Netherlands.

One of the central objectives of Dutch horticultural auctions is price discovery. Related to price discovery, the assembling of

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produce has also been an important function. As a result of market developments, Dutch horticultural auctions have evolved from a price discovery institution towards a true marketing institution. This evolution has been enhanced by the central position acquired by Dutch auctions in the marketing channels of fresh horticultural produce. It demonstrates the move towards marketing management in horticultural markets, of which the central features are customer orientation and coherent planning of marketing instruments.

While marketing management is customary in many food industries, applying it to the marketing of fresh agricultural products poses specific problems. Individual farmers lack the capacity to set up such a system. Also, the terms of reference of some agricultural marketing institutions, such as bargaining cooperatives and auctions, are too narrow to be able to adopt marketing management on a large scale. Nevertheless, such marketing institutions must cope with the need for marketing management.

This paper analyzes the history of Dutch horticultural auctions from a marketing point of view. The central feature of their history is the evolution from an institution focused on price discovery, towards a marketing institution performing price discovery within a broader marketing framework. In this sense we address a subject which is of broader interest. At present, many agricultural marketing institutions, such as marketing boards and selling cooperatives, face the challenge of establishing marketing policies based on consumer orientation and on a coherent marketing plan, i.e., on marketing management.

This paper is organized as follows: First, a conceptual framework is proposed to assess the suitability of marketing management by agricultural marketing institutions. Then, the history of Dutch horticultural auctions is briefly reviewed. Finally, the basic concepts proposed are applied to the evolution of Dutch horticultural auctions, in particular since the Second World War.

MARKETING MANAGEMENT—A TASK FOR AGRICULTURAL MARKETING INSTITUTIONS

The Need for Marketing Management

According to Kotler (1988, p.11): "Marketing (management) is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives." Marketing management is concerned with adjusting the marketing instruments of a business or organization to the needs, wants and spending capacity of target groups, in order to achieve certain marketing objectives. As such, it covers the basic marketing questions: "Which benefits should be incorporated in a product, at what price should the product be sold, what kind of information and which other promotional stimuli should be offered, and at what time and place should the product be supplied to the market?" (see also Hunt, 1976).

Agricultural marketing theory focuses on marketing functions, summarized as follows: (A) Exchange functions (buying, assembling, selling); (B) Physical functions (storage, transportation, processing); (C) Facilitating functions (standardization, financing, risk-bearing and market intelligence), (Kohls and Uhl, 1985). This functional approach has been one of the mainstreams of general marketing theory (e.g., Weld, 1917; Fullbrook, E.S., 1940; Clark and Clark, 1947; Bartels, 1970; Sheth, Gardner and Garrett, 1988), but has been superseded since the fifties by marketing management. Agricultural marketing as a scientific discipline did not follow this evolution and has remained aloof from the development in general marketing theory. In order to bridge this apparent gap, it is suggested that marketing management be used with respect to the four P's, as a framework for classifying and executing marketing functions which are distinguished in the functional approach (Meulenber, 1986). For instance, standard-

ization and processing might be considered as elements of product policy; buying, selling and risk-bearing may be looked upon as elements of price policy; market information may be regarded as an element of communications policy; and storage, transport, financing, assembling and also some elements of buying and selling are perceived as marketing functions within the domain of distribution policy. In this respect, it is interesting to note that Sheth, Gardner and Garrett (1988) argue the other way: "Obviously, however, the four P's of product, price, promotion, and place are actually only derivatives from earlier classification systems presented by functional school theorists, such as Shaw, Weld, Ryan, and especially McGarry."

In general, the environment of a marketing system influences the need for marketing management. A few examples may clarify this point. Changing consumer needs and desires requires extensive product policies. Changes in supply also call for comprehensive marketing policies. For example, increasing production capacity in the agriculture and food industry requires promotional and selling efforts in order to create demand. At present, western agricultural markets are changing in many respects: consumers change demographically, in life style, food habits, health consciousness and spending capacity; competition increases because of technological innovation, and internationalization of markets; retail companies have become dynamic forces in food markets. In order to respond adequately to these market changes, marketing management is necessary because both product and promotional policies have also become essential elements of marketing strategies.

The Ability to Perform Marketing Management

The marketing capacities of a company are largely determined by market structure. In particular, company size and product dif-

ferentiation are decisive in this respect. Consequently, the need for adequate marketing policies has stimulated horizontal integration in agriculture. It has also promoted vertical marketing structures as a means of coordinating production and marketing. In adopting marketing management, some agricultural marketing institutions face problems because of their specific terms of reference. For instance, auctions and bargaining cooperatives have been specifically set up to improve price formation. Various marketing boards are especially involved in the promotion of agricultural products. The increasing need for marketing management stimulates such "limited function" institutions to reconsider their original terms of reference. The following questions therefore seem relevant:

- which institutional characteristics impose constraints on adopting marketing management;
- which strategies can be pursued within the institutional constraints to guarantee adequate marketing policies?

Institutional characteristics which might impose constraints on adopting marketing management are the *objectives* and the *marketing power*, the first being fundamental and the second technical.

Institutional Objectives

The objective of many agricultural marketing institutions is to obtain the highest price for the agricultural products supplied by growers. Sometimes this is a short term objective, and intermediate to the medium and long term objective of the producers. For instance, auctions aim at optimal daily price discovery, which is intermediate to the growers' medium or long term objective of "the highest price" for a product. Or, another example, promotional boards which have communication goals are intermediate

to the objectives of an industry with respect to sales or market share.

The capacity of an agricultural marketing institution to manage marketing instruments depends on institutional objectives. As a result of differences in institutional objectives:

- the number of marketing instruments under command may vary from one P, such as promotion, in the case of a promotional board, to four P's in the case of a milk-marketing board that processes milk into dairy products.
- involvement in marketing may differ in both number and intensity of the following marketing activities: market research/market intelligence; marketing advice to individual companies; decision making with respect to specific aspects of marketing processes, such as price formation; marketing decision making in specific market segments, e.g., export markets; or decision making on the total marketing operation for a product. This sequence of activities implies increasing responsibility of an agricultural marketing institution for its target group.

If the marketing institution's responsibility for farmers' income is greater, there will be more pressure to engage in marketing management. For instance, a bargaining cooperative responsible for the price of farmers' products will engage more readily in marketing management than a promotional board, which is concerned with promotion.

Institutional Marketing Power

Whether "limited function" agricultural marketing institutions, while still performing their traditional functions, can expand their activities from a narrowly defined set of activities to those encompassed in a broader marketing management policy, depends on their power in the marketing channel. According to

Stern and El-Ansary (1988), bases of power available to a marketing channel member are: rewards, coercion, expertness, reference identification, and legitimacy. Little (1970), distinguished between the economic power and position power of companies in the marketing channel. These power bases affect the potential of agricultural marketing institutions to embark on marketing management.

The importance of *rewards* as a basis of power seems to be correlated with the degree to which a marketing institution is, by vocational objective, concerned with farmers' income. *Coercive* power seems to be important for those agricultural marketing institutions having a monopoly, or near monopoly, in the marketing channel. A case in point is a marketing board which, by law, has the sole authority to market the produce of all farmers in a specific sector of agriculture. *Expertness* is essential in order to gain acceptance for widening marketing activities. For example, a good performance in a specific marketing task by a selling cooperative encourages member farmers to award additional marketing tasks to that cooperative. *Reference identification*, in the sense that farmers feel bound to do business with a particular agricultural marketing institution, does not seem, in general, to be of great importance as a power basis, but may be of incidental importance. For example, it is argued that the modern farmer judges a cooperative on its financial benefits rather than on ideological grounds. This may erode the differential advantage over private marketing institutions. *Legitimacy* of the institution stems from values internalized by farmers, giving rise to the belief that the marketing institution should, or has a right to, exert influence and that the farmers are obliged to accept it (Stern and El-Ansary, 1988). This is particularly significant for statutory authorities set up by government, under legislation, as is the case of Marketing Boards and Commodity Boards. The legally based rights must be obeyed by the farmers. Also, it could be that

farmers consider a marketing institution, such as a cooperative, to be entitled to prescribe specific actions. This, however, is generally based on cooperative voting.

The position power of an agricultural marketing institution depends on its efficiency and effectiveness in the exchange process. When farmers and middlemen are indifferent to, or would rather bypass, the agricultural marketing institution, the position power of the institution is weak, and vice versa. For instance, technical markets for eggs and pigs have lost position power and some have even disappeared. *Economic power* is based on the financial, technological and managerial capacities of marketing institutions. They generate bases of power which have already been discussed, such as rewards, coercion and expertness. They also enhance the institutions' ability to invest in marketing management policies.

Strategies Pursued by Agricultural Marketing Institutions in the Need for Marketing Management

Agricultural marketing institutions vary in their responses to the need for marketing management. The following classes of responses can be distinguished.

No effective answer. The need for functions traditionally performed by a marketing institution is becoming less and can be performed more efficiently by other companies in the marketing channel. The marketing institution cannot adapt its traditional functions to the new marketing needs of the industry and finally disappears. For example, in western countries, technical markets for pigs, poultry and eggs have already disappeared, and dairy selling cooperatives have been integrated into processing cooperatives.

Adaptation of traditional services only. Marketing institutions adapt traditional activities to the needs of changing marketing

policies in the industry, in particular to the needs of the emergent leading marketing companies in the marketing channel. For instance, Commodity Boards in the Netherlands adjust their activities to the marketing management of large cooperative and private processing companies. Some technical markets, such as futures markets, adapt their services to the changing needs of companies, while still keeping their core business the same.

Expansion towards marketing management. Some agricultural marketing institutions expand their activities by horizontal and vertical integration, in order to achieve a marketing management operation for a product throughout the marketing channel. As a result, vertical marketing systems emerge. They are administrative, contractual or corporate systems. Administrative coordination of marketing operations throughout the channel is pursued by agricultural marketing institutions, having limited formal authority in relation to farmers or having insufficient resources to handle adequately the marketing mix of a product themselves. For example, marketing cooperatives coordinate farmers' decisions by advice, premiums or special programmes. In this case, the cooperative marketing programme relies heavily on the quality of member-growers.

Contract farming and corporate marketing systems offer marketing institutions the formal authority to implement marketing programmes in their respective fields.

DUTCH HORTICULTURAL AUCTIONS— A “PRICE DISCOVERY” INSTITUTION EVOLVING TOWARDS A “MARKETING” INSTITUTION

Introduction Period: 1887-1914

On 29 July 1887, vegetables were sold in the Netherlands for the first time by Dutch auction: a grower decided to apply this

selling method in order to get the best price for his produce.¹ In 1889, the first auction was set up by growers in response to the bad performance of wholesalers in marketing new potatoes. The number of auctions rapidly increased to 127 horticultural auctions achieving a turnover of 362 million guilders (at 1986 prices) in 1915.²

The rise in the auction system during the introductory period was enhanced by market changes. Production centres, situated at a substantial distance from domestic and foreign consumption centres, emerged in various parts of the country. For example, the export of fruit and vegetables, in particular to Germany and England, increased from about 100,000 tons in 1890 to about 294,000 tons in 1910. It was time-consuming, if not impossible, for growers to sell their produce in domestic and foreign consumption centres. So, instead, they sold to local assemblers or sent their produce on consignment to consumption centres. But growers were not well informed about markets and were dependent on the performance of wholesalers. Some wholesalers were inefficient and unreliable, which stimulated the establishment of both cooperative auctions and selling cooperatives. Kemmers (1987) suggests that cooperative auctions were preferable to selling cooperatives at that time since: (a) managing a Dutch auction was simpler and required less thorough market knowledge than managing a selling cooperative; and (b) the assortment of individual selling cooperatives was not wide enough to serve clients properly.

At the outset, the organization of auctions was simple. They operated locally or regionally with no national coordination. Member-growers were not obliged to sell all their produce through the auction. This obligation was imposed for the first time by a vegetable auction in 1901. Marketing functions of auctions at that time were: price discovery, quality control, assembling of produce, and warranty of payment to growers.

Growth Period: 1915-1940

Fruit and vegetable auctions increased in number from 127 in 1915 to 159 in 1940, and flower auctions from 3 in 1915 to 22 in 1940. Sales of fruit and vegetables by auction increased from 362 million guilders in 1915 to 1,039 million guilders in 1940 and of flowers from 6 million guilders in 1915 to 97 million guilders in 1940 (at 1986 prices). During this period, horticultural auctions became the major marketing institution in the marketing channels of horticultural products. No fundamental changes took place in the mission of horticultural auctions, but various environmental and institutional changes made auctions more suited to their primary objective, price discovery. Some major developments will be reviewed briefly.

Environment

Demand for fresh horticultural products in Western Europe increased during this period, except during the First World War and the economic crisis of the thirties (see for instance, Burnett 1968; Gollnick, 1959; Prest, 1954; Stone, 1954). Gradually, consumers became more quality conscious and variety prone. Consumption of leafy vegetables and tropical and subtropical fruit increased (for the United Kingdom see: Stone, 1954). Dutch exports of fruit and vegetables increased from about 294 thousand tons in 1910 to 354 thousand tons annually during the period from 1926 to 1928, but decreased, because of economic and political problems in western Europe to 199 thousand tons annually in the period from 1936 to 1938. Competition was not a major problem, but protectionism hampered exports during the thirties. Improved transport facilities advanced the international trade in fresh horticultural products.

In order to control exports during the First World War, the Dutch government, in 1916, required all fruit and vegetables for

export to be sold by auction. In 1934, all fruit and vegetables were again required to be sold by auction. This requirement remained in force until 1966, and has been instrumental in making horticultural auctions in the Netherlands the major marketing institution for fresh horticultural products.

Marketing Instruments

Price discovery remained the task of auctions during this period. New activities were started. An export control bureau was established in 1924 to improve the quality of exported fruit and vegetables. Promotional funds for fruit and vegetables have been raised since 1929 by a levy of 1/20% of total sales by auction.

Organization

A very significant development was the establishment of a central association of auctions in 1917, the Central Bureau of the Horticultural Auctions in the Netherlands (Centraal Bureau van de Tuinbouwveilingen in Nederland). This association provided for the common interests of auctions for fruit and vegetables and, as a result, for marketing at the sector/industry level.

Expansion and Maturity: 1945-1988

Because of the exceptional market situation during the Second World War, developments in the auction system during the period from 1940 to 1945 will not be discussed.

Since 1945, and in particular since 1960, horticultural auctions in the Netherlands have taken a broader approach to marketing operations. Marketing management was needed in order to profit from available market opportunities. A coherent use of marketing instruments, in particular of product and promotion, was required. This was in line with general marketing developments:

Where the pre-1940 period was preoccupied with making the same product cheaper, the postwar period saw a new dimension added to competition, in which the focus was to try and make the old product better, or even more bold, to try and launch a new product. (McKitterick, 1957)

Cooperative auctions face several constraints when applying marketing instruments since, in principle, auctions themselves do not trade. On the other hand, in view of their responsibility to growers and their central position in the marketing channel, horticultural auctions have the duty to advance marketing management in marketing horticultural produce. With respect to fruit and vegetables, this is the task of the Central Bureau of the Horticultural Auctions in the Netherlands.

Auctions for flowers and pot plants have expanded tremendously since the Second World War. In 1974, a national association was set up, "Association of Flower Auctions in the Netherlands" (Vereniging van Bloemenveilingen in Nederland). This Association has established with other industry-organizations a marketing committee for Dutch flowers. The following description of developments since the fifties will focus on marketing environment, marketing instruments and the organization of auctions.

Environment

Consumption of fruit and vegetables, in particular fresh fruit and vegetables, has increased substantially since the end of the Second World War (see for instance: Eurostat, 1988; Ministry of Agriculture, Fisheries and Food, 1987; Wöhlken, 1981; Filip and Wöhlken, 1984; Boddez and Ernens, 1980). In the eighties, consumption of fruit and vegetables stabilized in terms of volume, but changed because of increasing health consciousness, a preference for fresh and natural food (e.g., Steenkamp, 1989)

and an increased appreciation of variety in consumption (Wierenga, 1984). The affluent western consumer substantially increased expenditure on ornamentals but, per capita, expenditure differs from country to country because of cultural differences (see, e.g., International Association of Horticultural Producers, 1988; Tilburg van, 1984).

While Dutch horticultural exports profited from the open EC market, they experienced more competition, in particular from Mediterranean countries. The EC intervention scheme, which came into operation in 1967, has been somewhat beneficial to Dutch producers of fruit and tomatoes. Otherwise, the Common Agricultural Policy has had a limited impact on Dutch horticultural production and on the marketing of Dutch horticultural products.

Retail sales of fresh fruit and vegetables shifted to a high degree from small greengrocers to large retail chains, many of which have specific marketing policies for fresh fruit and vegetables. They are cost conscious and have substantial bargaining power. Flower sales have not shifted to the large chains to such an extent, and are still sold primarily through specialized retail outlets and garden centres.

The requirement by the Dutch government in 1934 to sell fruit and vegetables by auction, was cancelled at the end of 1965. It should be kept in mind, however, that the regulations of all cooperative auctions still require members to sell their produce by auction. Another environmental change in the fifties was the establishment of Commodity Boards for fruit and vegetables, and for ornamentals. Established by public law, these Boards must provide for the economic interests of the industry at large. In particular, the Central Associations of Auctions were obliged to coordinate their marketing activities with those of the Commodity Boards.

Marketing Instruments

Gradually, marketing policies of cooperative auctions have covered all classic marketing instruments: price, product, promotion and distribution. Minimum price schemes have been set up for many varieties of fruit and vegetables since 1948. They are organized as follows: (a) a minimum price is fixed each year at a level substantially below production costs; (b) produce which cannot be sold at the minimum price is destroyed or, in exceptional cases, diverted to non-competitive outlets; (c) a producer, whose produce cannot be sold, receives a percentage of the minimum price; (d) the minimum price scheme is financed by a levy on every unit sold by auction. Optimal price formation at the auction requires strong competition between buyers. In order to attract sufficient buyers, auctions should carry an attractive assortment of sufficient size. As a result, auctions have been decreasing in number since 1945 due to mergers: the number of cooperative auctions for fruit and vegetables decreased from 162 in 1945, with sales of 1.3 billion guilders (at 1986 prices), to 30 in 1988 with sales of 3.2 billion guilders (Centraal Bureau van de Tuinbouwveilingen, 1989). This process of concentration has not yet come to an end. Flower auctions decreased from 17 in 1945, with sales of 251 million guilders, to 12 with sales of 3.4 billion guilders in 1985 (at 1986 prices). In fact, two flower auctions, having a share of more than 75% of auction sales, now dominate the market. It is suggested that the number of flower auctions will have soon decreased to only two, or perhaps three.

Competition between buyers has been stimulated not only by concentrating the supply at fewer auctions, but also by creating the opportunity for wholesalers to purchase at several auctions at a time by connecting the price formation systems of the auctions concerned.

Marketing management by auctions has come of age since

product policy has been included in marketing policies. In order to attract sufficient buyers, auctions should supply an assortment which is up to date, of good quality and of sufficient quantity. Buyers prefer to buy all products at one spot. In order to expand product assortment, the central association of fruit and vegetable auctions has set up product innovation programmes, which are essentially of the "me too" type. Foreign varieties, which seem to be a promising extension of the Dutch assortment, have been introduced. Horticultural producers, prepared to grow such a new variety, are guaranteed a satisfactory price during the introductory period. Eventually, the product should prove its marketability and a price guarantee will no longer be given. Products introduced in this way are, for example, sweet peppers, aubergines and some new tomato varieties. This type of "new product" operation is of the "low budget" type, and relies on the willingness of growers to embrace new opportunities. Flower auctions have tried to broaden the assortment in a similar way. In addition, some have widened the assortment by auctioning foreign supplies from e.g., Israel, Kenya and Zimbabwe.

Product quality has become increasingly important to auctions. Vegetables and flowers are pre-cooled to enhance freshness and prolong shelf-life. More attention is being paid to quality control with respect to residues of pesticides/insecticides. Packaging is receiving more attention from both a marketing and a logistics point of view.

Promotional programmes have been set up to stimulate demand for Dutch horticultural products. They are financed by levying all produce sold by auction. In 1987, the Central Bureau of Horticultural Auctions in the Netherlands spent 20.3 million guilders on promotion for fruit and vegetables, i.e., 0.6% of total sales of 3.3 billion guilders. This expenditure is substantially more than the 0.05% of 0.9 billion guilders (at 1986 prices) in 1930. Promotional funds for flowers and pot plants, amounting to 19.6 million guilders in 1988, are raised by the Commodity

Board for Ornamentals. Promotional programmes for flowers and pot plants are organized by a committee on which the Commodity Board for Ornamentals, the Association of Flower Auctions in the Netherlands and the Industry Board of Wholesalers of Flowers are represented.

Assembling has been an important marketing function of auctions right from the start. Concentration of auctions made this physical function even more necessary. For instance, in 1985 about 6300 growers — both members and nonmembers — supplied the flower auction at Aalsmeer. This auction served about 2600 buyers during that year. It used 45.5 thousand carts to transport flowers and pot plants (Verenigde Bloemenveilingen Aalsmeer, 1986). Efficient logistics are essential for both wholesalers and retailers. Logistical facilities are, therefore, provided by auctions. Information services to growers and traders also facilitate trade by auction.

In addition to the traditional Dutch auction system, special selling systems have been introduced by cooperative auctions to serve specific groups of suppliers and buyers. A sort of brokerage system has been set up for trading pot plants. It serves producers and buyers who prefer to trade huge lots of pot plants in direct contact.

The Central Bureau of Horticultural Auctions in the Netherlands has set up a selling organization to carry out special transactions for fruit and vegetables, such as large sales to Eastern European countries. So far, this organization has not been a great success.

Logistic efficiency at auctions has been constantly under review. Materials handling has become more efficient because of better transportation systems and better packaging. Also, the efficiency of exchange has been improved in various ways. For instance, supplies from different fruit growers are combined into one lot in order to sell large quantities more efficiently. Clearly,

a prerequisite for such efficiency measures are good systems of grading, sorting and quality control.

Organization

The formal organizational structure of auctions for fruit and vegetables has not changed a great deal since 1945. But in the past forty years, considerable organizational changes of a technical nature have been made. Many of these changes are related to developments in the marketing policies of auctions. For instance, the central association of horticultural auctions in the Netherlands has established departments for product policy, market research, promotion and extension, and for prices and market information. Product committees, on which growers of the product in question are represented, have been set up to advise the board of the central association; 36 committees were in operation in 1987. The board of the central association, apart from a professional president, consists of representatives of the member-auctions. Ultimately, the general assembly of this central association decides upon strategy. While various marketing issues concerning fruit and vegetables, such as promotion, minimum price schemes and product innovation, are handled by the central association, individual auctions decide independently on various marketing issues, in particular on issues related to physical distribution and services to wholesalers and retailers. In this respect, individual auctions will be in a better position because of further horizontal integration that is to be expected in the near future. A proper balance between individual and collective marketing operations will become increasingly important to fruit and vegetable auctions.

An important organizational development in flower marketing since 1945 was the establishment of the National Association of Flower Auctions in the Netherlands in 1974. This association offers marketing services to member-auctions, in particular in

the field of market research, product research and quality control. It plays an important role in a national marketing committee for Dutch flowers and pot plants. The marketing strategy developed by this committee serves as a guideline for the allocation of promotional funds raised by the Commodity Board for Ornamentals.

Two cooperative auctions with more than 75% of the sales by auction of flowers and pot plants have substantial marketing capacities. The marketing operations of these two auctions encompass not only a service to wholesalers and retailers, but also elements of promotion, physical distribution and product policy with respect to flowers and pot plants.

HOW DID DUTCH HORTICULTURAL AUCTIONS COPE WITH THE NEED FOR MARKETING MANAGEMENT?

In the second section of this paper, it was argued that the objectives and marketing power of agricultural marketing institutions influence marketing management. In this section, developments of Dutch horticultural auctions, in particular since the Second World War, will be discussed from that aspect.

Objectives

The central objective of Dutch auctions is optimal price discovery. This is extremely important in markets of fresh horticultural products, because of daily fluctuations in supply and because of the perishable nature of the produce. Dutch horticultural auctions have performed well on that point. The following market characteristics have been beneficial in this respect: the major market share of auctions (about 80% for fruit and vegetables, 92% for flowers and 65% for pot plants in 1987 [Wijk van, 1988]), larger auctions, more market information, better stan-

dardization and quality control of produce. But price discovery by auction is essentially short term oriented. It contributes to, but does not guarantee, optimal prices to growers in the medium and long term. Nevertheless, the latter should also be of great concern to a *cooperative* auction. Prices in the medium and long term not only depend on effective price discovery, but on marketing policies in respect of product, promotion and distribution. An auction *as such*, however, has a limited say in these marketing instruments. In principle, an auction cannot become involved in production or sales because of its objective; the auction is an intermediary between buyers and sellers. Thus, it would seem that horticultural auctions playing a central role in marketing Dutch horticultural products are hindered by their primary objective of price discovery from engaging in marketing management. For a cooperative auction, this is less important, as members are willing to give more marketing facilities to the auction. In fact, the third section of this paper demonstrates that Dutch horticultural auctions have been engaged in activities concerning promotion, product development and distribution, which are not essential to short term price discovery. They have been drawn on with the consent of their members to achieve the objective of a good price in the short, medium and long term. While marketing tasks of auctions have been substantially extended, price discovery by auctioning has remained their core business.

Marketing Power

Auctions, including cooperative ones, have limited control over the supply from producers and have no formal authority over product quality or over the product assortment supplied to the market. As auctions may not interfere with the business of wholesalers and retailers, they have limited opportunities to control the distribution of products throughout the marketing chan-

nel. Neither is promotion, as a marketing instrument, an essential task of auctions.

The extension of marketing tasks towards marketing management, as depicted in the third section of this paper, is enhanced by the medium and long term responsibilities of *cooperative* auctions towards their members. To a large extent, it is based on the marketing power built up by auctions as a result of good performance of the classic marketing functions. This point may be elaborated with the help of the bases of power in a marketing channel (Stern and El-Ansary, 1988), discussed in the second section.

Because of their *rewards* to the growers as to price formation, Dutch horticultural auctions are in a strong position to expand marketing activities beyond price discovery. Price discovery is a central function in a market of perishables with daily variations in supply and demand. In the Netherlands, auctions seem to perform this function adequately.

In theory, auctions have little *coercive* power over growers since growers themselves own cooperative auctions and are entitled to determine the extent of marketing policy. In practice, auctions have coercive power since growers are dependent on them for the sale of their produce. The daily market supply of an individual grower of flowers and vegetables is too small to be sold directly to a wholesaler very efficiently. To a lesser extent, this is also the case for fruit growers who, at harvest time, have larger quantities available. Consequently, fruit auctions have less coercive power than flower and vegetable auctions. Auctions also have some coercive power over wholesalers, who often rent facilities at the auction, and because they often have no equivalent supply alternatives.

The *expertise* of both cooperative auctions and their central associations in marketing and market research has made them suitable institutions to develop marketing management policies throughout the marketing channel.

Reference identification, meaning that the grower has a feeling of membership or a desire to join the cooperative auction for ideological reasons, does not seem important as a basis of authority for cooperative auctions. The economic and commercial orientation of horticultural growers is not a strong basis for identification with the auction on ideological grounds: it is the price that counts.

Clearly, when the central association of cooperative auctions, or an individual auction, has decided on activities in the field of market research, promotion, product development etc., the subsequent levying of members to finance the activities will be considered to be *legitimate*. So, sufficient consensus between both growers and auctions is necessary before expanding the marketing activities of either auctions or central associations of auctions.

Because of their large market share and their cooperative structure, horticultural auctions in the Netherlands are very well *positioned* to become/remain leading marketing institutions in the marketing channel for horticultural products.

Since cooperative auctions do not sell products themselves but only deliver services, they would probably need to finance wider marketing management by levying member-growers. Therefore, the *economic* power to finance wider marketing management lies with the growers.

Strategy

The marketing management challenge might have been met by transforming cooperative auctions into selling cooperatives, which have more grip on marketing operations. This would have been a drastic change, and would have also posed a threat to the private wholesale companies, many of whom perform well in finding outlets for Dutch produce. In addition, it would have meant the end of the daily price discovery process by auction.

Consequently, price orientation would have become difficult in a market of perishables where prices vary daily because of changes in supply and demand. Thus, the primary function, price formation, has remained central and, within that context, horticultural auctions have developed additional marketing activities to set up marketing management. So, it would seem that cooperative auctions have been able to develop marketing management policies throughout marketing channels by cooperating with the other parties involved. It is a type of marketing management distinguished as "marketing management by coordination" in the second section of this article.

Marketing management by coordination and persuasion within the constraints of the auction system challenges the marketing ingenuity of auction managers; for instance, how to fit marketing policies to the desires and needs of the large retail chains, who are interested in issues such as special deals, forward selling, quantity discounts and long term contracts. Segmentation of marketing programmes according to the desires and needs of both large retail chains and small greengrocers cannot be accomplished by daily auction operations, offering the same opportunities to every buyer. Therefore, the basic question is to what extent can auctions serve special clients with special programmes without destroying the core of the auction system, namely effective price discovery.

It cannot be denied that marketing management by coordination and persuasion crucially depends on growers and wholesalers being dynamic market-oriented entrepreneurs. Otherwise it is a hard task for horticultural auctions to achieve the appropriate marketing mix, in particular product quality and assortment, by coordination and advice only. Fortunately, Dutch horticultural growers seem to be dynamic entrepreneurs who are anxious to innovate. They also seem willing to cooperate with programmes initiated by auctions. The cooperative structure of auctions and the limited size of horticultural holdings stimulate this willing-

ness. Also, many wholesale companies dealing in fresh horticultural products are medium sized undertakings, prepared to cooperate with auctions in commercial projects which aim at developing new markets and at maintaining existing markets. Large wholesale companies appear to go along with the marketing plans of auctions quite harmoniously too. Nevertheless, in the future some large wholesale companies could emerge, who operate on an international scale and may challenge the leadership enjoyed by auctions in the marketing channel of fresh horticultural products in the Netherlands. As a result, market segmentation of auctions in relation to different types of wholesale companies might also become important.

CONCLUSIONS AND FUTURE DEVELOPMENTS

Horticultural auctions in the Netherlands have been able to implement marketing management policies, based on customer orientation and on a coherent use of marketing instruments, without a fundamental change in the price discovery process. Auctions, in particular the central associations of auctions, have been able to implement marketing management policies on the basis of their power in the marketing channel.

The future challenge to effective marketing operations of horticultural auctions in the Netherlands is how to tackle the need for market segmentation. Specific groups of buyers and suppliers, having substantial market power, will demand special conditions and services. How to maintain the balance between market segmentation and the performance of the price discovery process is a fundamental policy issue for the future. It will probably demand special programmes in conjunction with growers.

Dutch auctions will need to strengthen their international position as marketing institutions by expanding the use of computer

technology in price discovery and by improving market information services.

In view of the increasing competition to be expected from Mediterranean countries, product quality and services will become even more important in marketing horticultural products.

In order to accomplish future marketing tasks appropriately, further concentration of auctions is needed.

NOTES

1. Figures in this section are borrowed from Gijsbers (1987), if not otherwise indicated.

2. Rate of exchange at December 1986: 1 guilder = \$0.456.

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